

Weekly COVID-19 Update in Montana (as of 2/18/2022)

This report is a weekly snapshot of COVID-19 activity in Montana. Data are analyzed based on information available as of February 18, 2022. Data are provisional and expected to change as more information is received.

Case Data

Table 1. Summary of COVID-19 Activity – Montana, as of 2/18/2022

	TOTAL	RECENT WEEK	PERCENT CHANGE FROM PREVIOUS WEEK
REPORTED CASES	263,044	4,514	-18%
LABORATORY TESTS	2,614,831	27,864	-23%
HOSPITALIZATIONS	11,490	230	-22%
DEATHS	3,124	52	+49%

Figure 1. COVID-19 Cases and Hospitalizations over Time – Montana, as of 2/18/2022

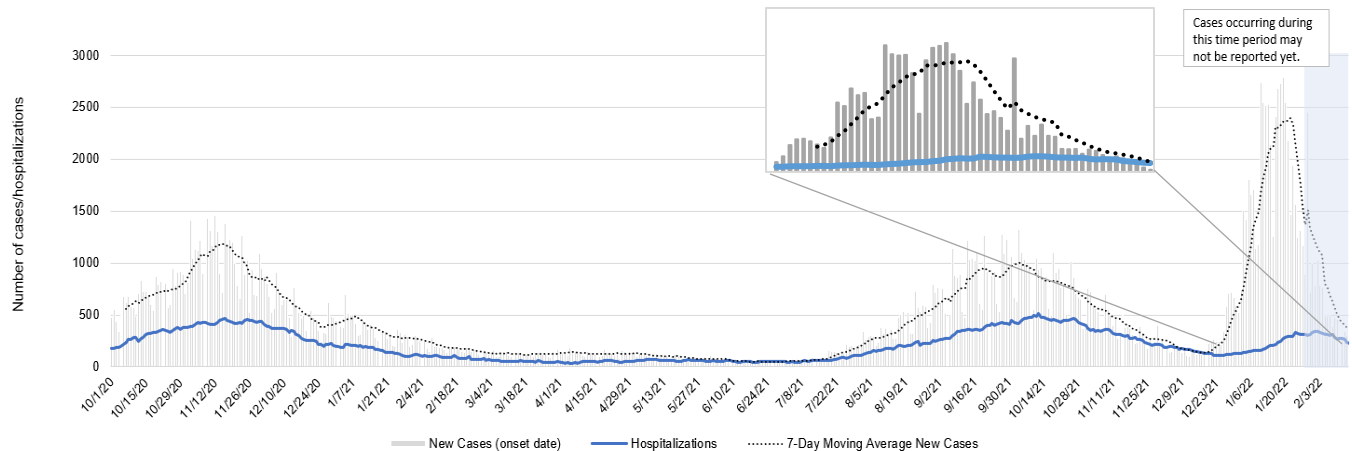


Figure 2: Status of Acute Care and ICU Beds – Hospitals in Montana, 2/9 – 2/22/2022

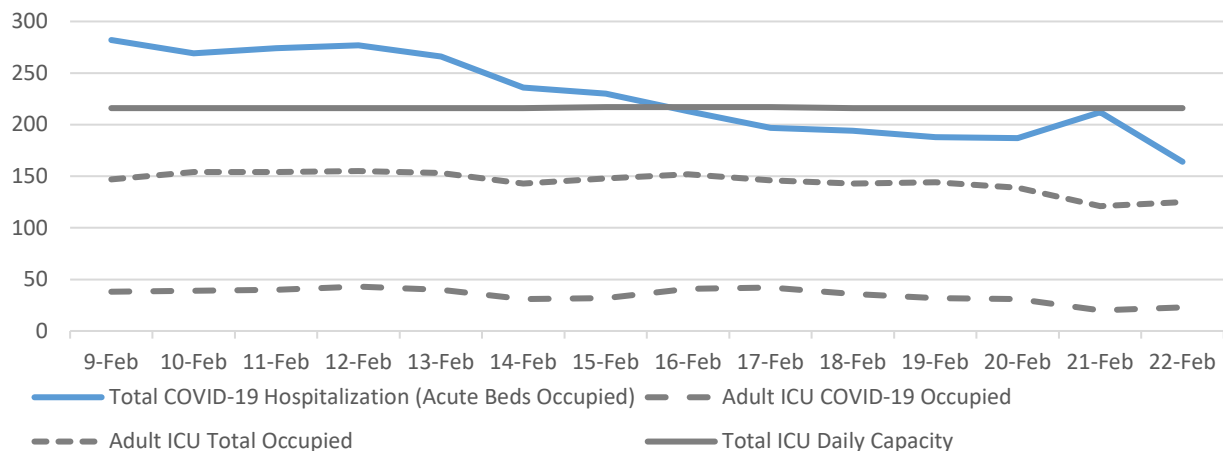
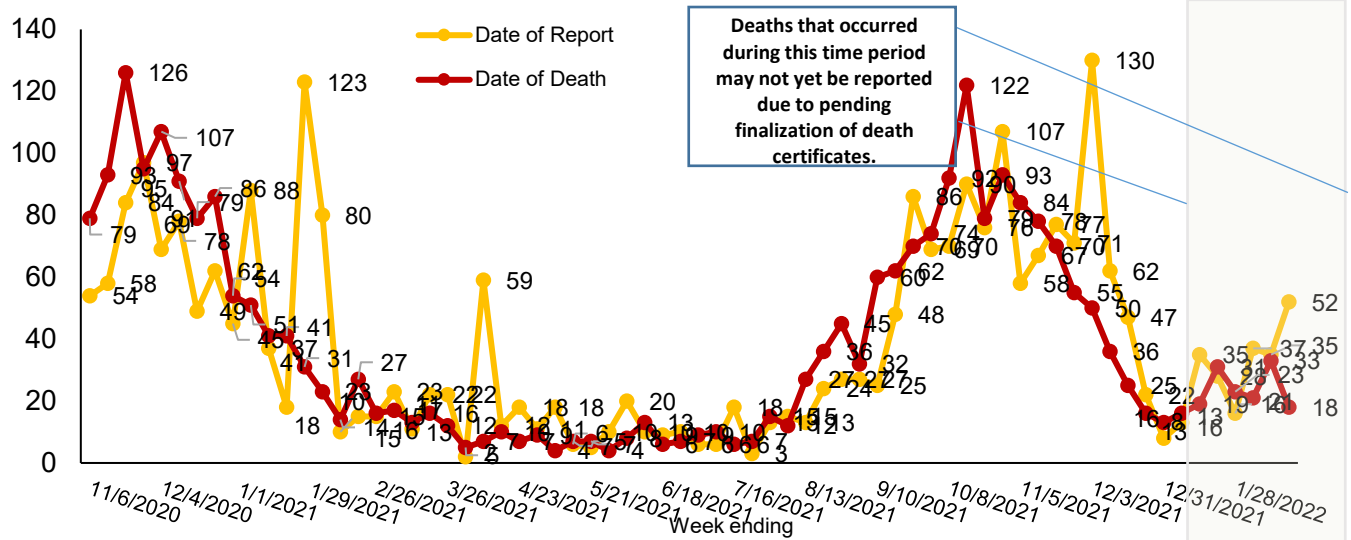


Figure 3. COVID-19 Deaths by Report Date and Date of Death – Montana, 11/1/2020 – 2/18/2022



Vaccine Data

Montana began vaccinating individuals in mid-December 2020 with a phased process: Phase 1A on December 14, 2020, Phase 1B on January 19, 2021, and Phase 1B+ on March 8, 2021. Vaccinations were opened to all Montanans age 16+ on April 1, 2021 and expanded to all Montanans age 12+ on May 10th, 2021. Most recently, the Pfizer vaccine was approved for the 5-11 year old age group on October 29th, 2021. To date, 1,401,975 doses have been given across the state and 54% of the eligible population is considered fully vaccinated (table 2).

Table 2: COVID-19 Vaccine Doses Administered for the 5 and older population – Montana, as of 2/18/2022

	NUMBER	PERCENT OF ELIGIBLE POPULATION	WEEK ENDING 2/4	WEEK ENDING 2/11	WEEK ENDING 2/18*
TOTAL DOSES ADMINISTERED	1,401,975		5,955	5,289	3,293
DOSE 1 ADMINISTERED	627,043	61%	1,427	1,423	820
FULLY VACCINATED INDIVIDUALS	554,094	54%	1,560	1,455	1,074

*the data for the most recent week are preliminary and are expected to be an underestimate of the doses administered during the week, due to a reporting lag.

Figure 4. COVID-19 Vaccine Doses Administered by Week, 5+ Years – Montana, as of 2/18/2022

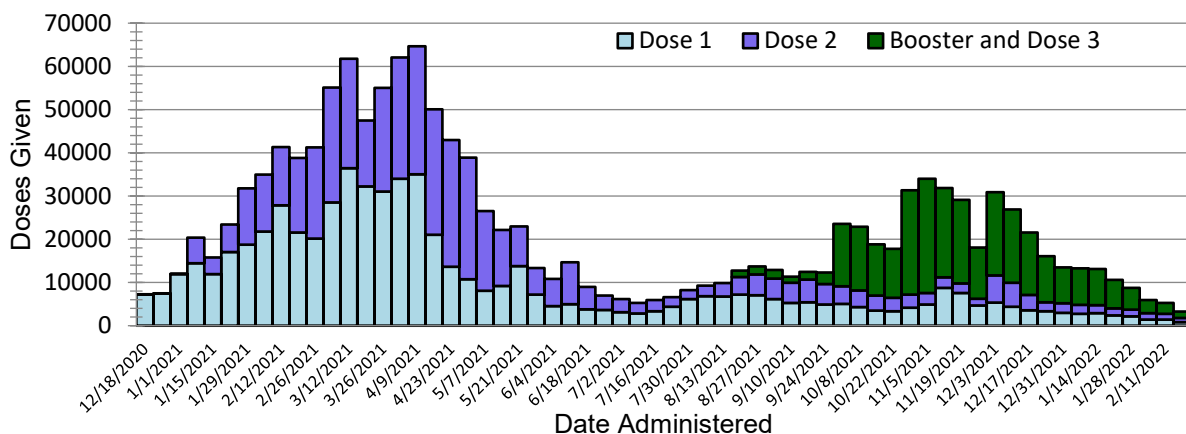
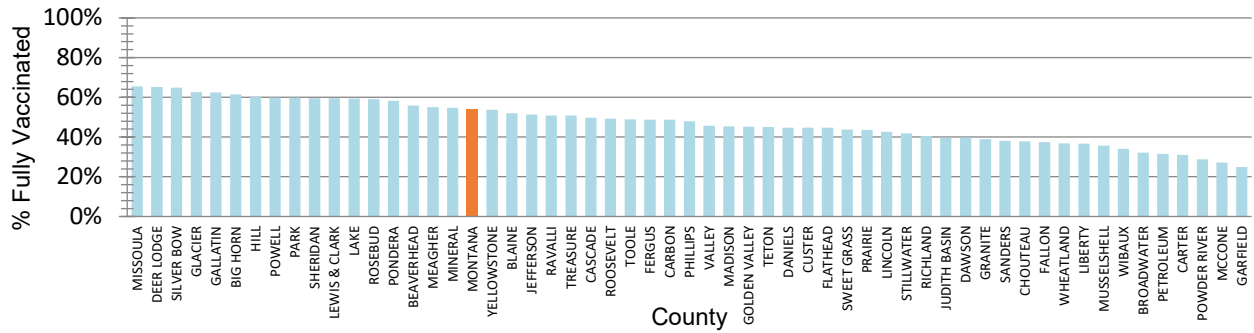


Figure 5. Percent of Eligible Montanans (5+ years) Fully Vaccinated by County – Montana, 2/18/2022



Variant and Breakthrough Cases

Figure 7 displays the percentage of the most common SARS-CoV-2 lineages detected each week, of all Montana samples sequenced that were collected that week. There were 11,536 samples from Montana that were sequenced and their lineages were reported to GISAID since September 2020; figure 6 displays the number of specimens sequenced by week.

As of February 22, there have been 2,485 cases in Montana infected with the Omicron variant, detected in most of Montana's local and tribal health jurisdictions. Last week, 157/158 (99%) specimens that were collected and sequenced were Omicron. In the last four weeks 888/890 (99.8%) specimens that were collected and sequenced were Omicron, and the remaining two were Delta. Omicron is the dominant circulating strain in the state, and is displayed in brown on the chart below.

Figure 6. Number of COVID-19 samples sequenced by collection date, Montana 2/19/2022 [n=11,536]

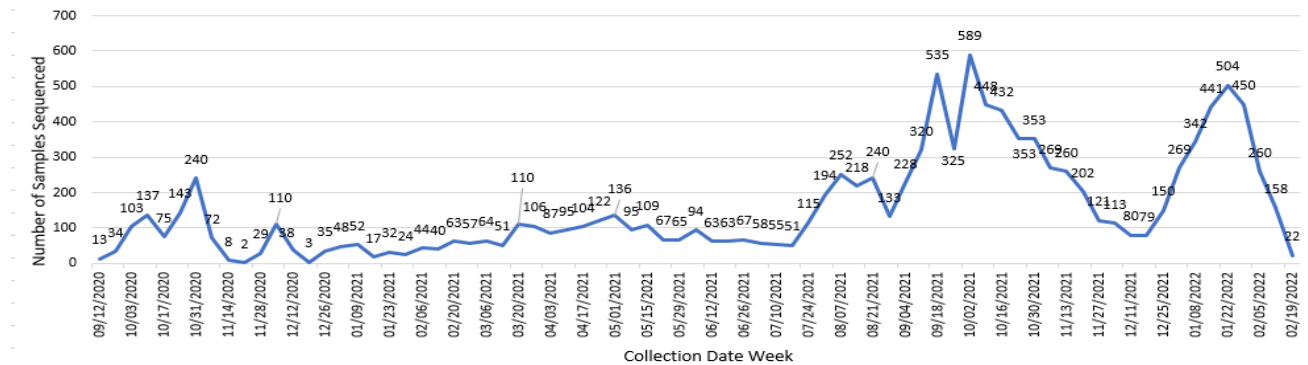
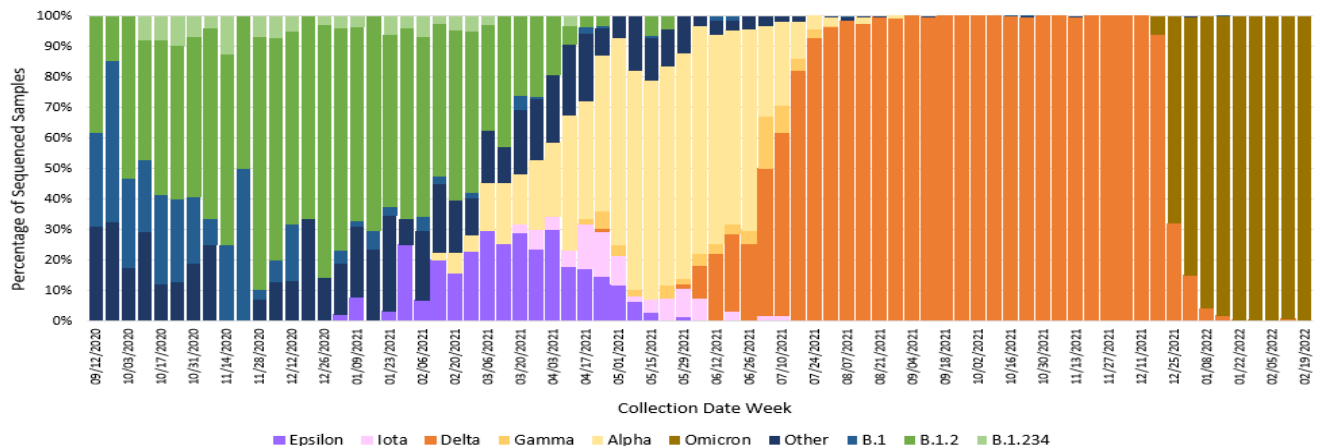


Figure 7. Percent of COVID-19 variants in sequenced samples by collection date, Montana 2/19/2022



A breakthrough COVID-19 infection is defined as a positive SARS-CoV-2 specimen collected ≥ 14 days after completing the primary COVID-19 vaccine series of an FDA-authorized COVID-19 vaccine. Studies show that protection from COVID vaccination decreases over time; in response, the CDC has recommended booster doses for eligible populations to protect against waning immunity. As of 2/18/2022, Montana reports 38,372 cases of confirmed breakthrough disease, which includes 1,279 hospitalizations and 339 deaths. CDC data from November show that unvaccinated adults were more than 4 times more likely to become infected with COVID, compared to fully vaccinated adults. However, when booster doses were considered, unvaccinated adults were more than 13 times more likely to become infected compared to fully vaccinated adults with booster doses.¹

Hospitalizations and Deaths and Vaccination Status

COVID-19-related hospitalizations and deaths were analyzed between **April 1, 2021 and February 18, 2022** to review vaccination status. Since the beginning of April 2021, 81% of Montanans who were hospitalized and 78% of those who died were unvaccinated at the time of infection (Table 3). Of the 6,647 individuals who were hospitalized during this time period, 126 (2%) were <18 years old, 911 (14%) were 18 to 44 years old, 2,210 (33%) were 45 to 64 years old and 3,400 (51%) were ≥ 65 years old.

Additionally, COVID-19-related hospitalization and death data from **December 25, 2021 – February 18, 2022** (last 8 weeks) were analyzed to review vaccination status. Sixty-eight percent of Montanans who were hospitalized and 74% of those who died had not received a COVID-19 vaccine (Table 4). Of the 1,115 individuals who were hospitalized during this time period, 36 (3%) were <18 years old, 115 (10%) were 18 to 44 years old, 298 (27%) were 45 to 64 years old and 666 (60%) were ≥ 65 years old.

Table 3. Vaccination status of COVID-19 hospitalizations and deaths – April 1 to February 18, 2022

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	6,647	1,528
UNVACCINATED	5,368 (81%)	1,189 (78%)
VACCINATED (BREAKTHROUGH CASE)	1,279 (19%)	339 (22%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<1-102 (63)	23-103 (71)
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	7-101 (74)	20-101 (81)

Table 4. Vaccination status of COVID-19 hospitalizations and deaths – December 25 to February 18, 2022

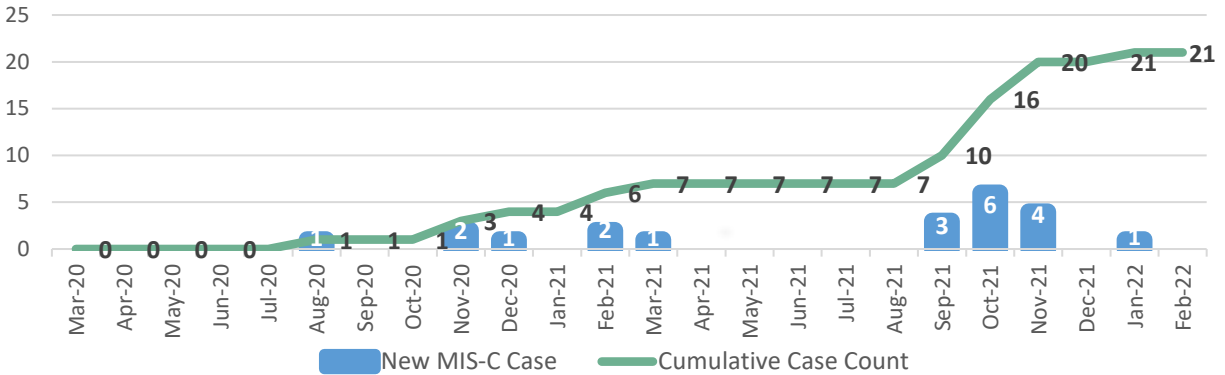
	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	1,115	174
UNVACCINATED	755 (68%)	129 (74%)
VACCINATED (BREAKTHROUGH CASE)	360 (32%)	45 (26%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<1-101 (66)	30-101 (73)
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	7-98 (73)	48-95 (78)

¹ CDC – COVID Data Tracker – Rates of COVID-19 Cases and Deaths by Vaccination Status.
<https://covid.cdc.gov/covid-data-tracker/#rates-by-vaccine-status>. January 25, 2022.

Multisystem Inflammatory Syndrome in Children (MIS-C)

As of February 18, 2022, there have been a total of 21 reported cases of multisystem inflammatory syndrome in children, or MIS-C, reported in Montana. There have been no deaths. Ages range from less than 1 year to 20 years old; median is 8 years. Ten cases were female, 11 were male. Cases are from 13 counties around Montana. The first case of MIS-C was reported in August 2020; 14 of the 21 cases have been reported since September 2021 (Figure 8).

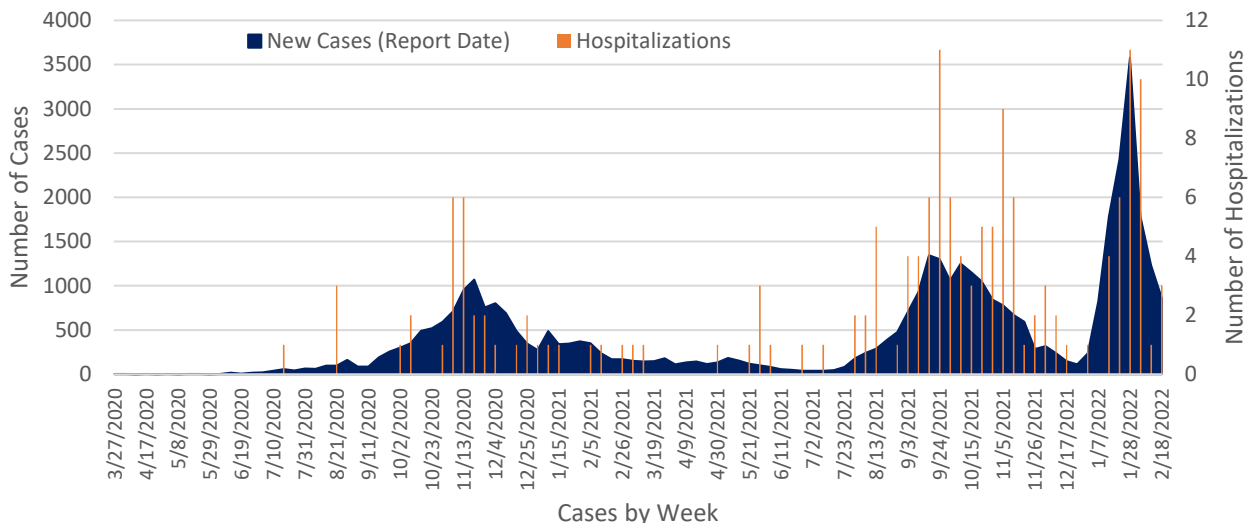
Figure 8. Montana MIS-C Cases by Month of Onset, March 2020 – February 2022



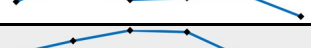
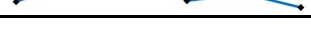
Cases and Hospitalizations Associated with COVID-19 Among Children

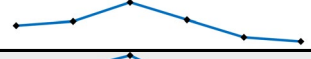
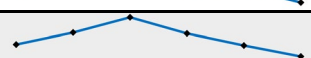
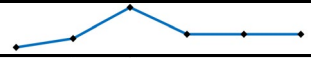
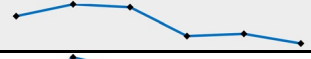
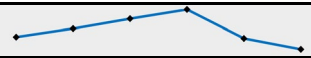
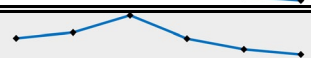
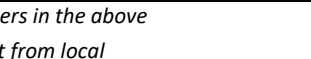
To date, there have been 41,453 children <18 years old in Montana diagnosed with COVID-19. Of those, 162 (<1%) have been hospitalized. Case rates among children follow a similar pattern to COVID-19 cases among all age groups (see Figure 1 for comparison) and increased sharply during the recent Omicron surge (Figure 9). There were 861 cases of COVID-19 in children reported during the week of February 12 – February 18, 2022, which is a 30% decrease in cases among that age group compared to the previous week. Three hospitalizations in children were reported that week.

Figure 9. COVID-19 Cases and Hospitalizations by Week, March 2020 – February 18, 2022, Children <18



Reported COVID-19 Cases by County with Trendline – Montana, past 6 weeks

County	14-Jan	21-Jan	28-Jan	4-Feb	11-Feb	18-Feb	change from previous week*	Trendline
Beaverhead	52	135	153	60	29	13	-16	
Big Horn	53	153	387	177	302	224	-78	
Blaine	23	101	139	32	175	22	-153	
Broadwater	26	41	41	32	25	29	4	
Carbon	88	62	89	52	33	15	-18	
Carter	1	1	10	3	2	2	0	
Cascade	541	948	1702	1149	941	938	-3	
Chouteau	26	25	22	28	27	13	-14	
Custer	68	139	128	66	44	32	-12	
Daniels	9	22	10	11	13	1	-12	
Dawson	48	80	106	102	37	8	-29	
Deer Lodge	102	165	164	100	66	19	-47	
Fallon	2	39	22	18	17	6	-11	
Fergus	67	44	153	67	76	67	-9	
Flathead	760	508	1223	915	581	1006	425	
Gallatin	2737	2369	1814	703	413	252	-161	
Garfield	19	7	12	2	4	3	-1	
Glacier	86	128	349	264	170	198	28	
Golden Valley	2	6	7	6	5	0	-5	
Granite	19	30	9	15	8	9	1	
Hill	107	165	312	157	158	33	-125	
Jefferson	90	125	148	80	63	20	-43	
Judith Basin	11	11	12	5	6	3	-3	
Lake	149	258	598	170	128	229	101	
Lewis and Clark	509	671	1490	956	326	168	-158	
Liberty	33	18	25	15	10	5	-5	
Lincoln	123	188	232	169	89	41	-48	
Madison	67	88	59	46	23	11	-12	
McCone	6	22	14	13	6	3	-3	
Meagher	9	30	43	10	17	3	-14	

County	14-Jan	21-Jan	28-Jan	4-Feb	11-Feb	18-Feb	change from previous week*	Trendline
Mineral	46	89	82	36	22	14	-8	
Missoula	1166	1405	2460	1502	526	302	-224	
Musselshell	19	24	35	15	21	5	-16	
Park	94	421	255	125	161	82	-79	
Petroleum	0	1	5	0	1	0	-1	
Phillips	15	45	31	21	22	9	-13	
Pondera	34	59	91	57	32	9	-23	
Powder River	3	5	12	6	6	6	0	
Powell	53	98	99	45	50	9	-41	
Prairie	12	16	6	14	6	3	-3	
Ravalli	188	305	268	198	113	37	-76	
Richland	67	29	156	82	43	18	-25	
Roosevelt	72	127	195	203	155	67	-88	
Rosebud	30	44	86	76	310	118	-192	
Sanders	89	121	113	36	42	16	-26	
Sheridan	4	34	24	22	24	8	-16	
Silver Bow	298	442	573	160	118	69	-49	
Stillwater	34	69	32	36	27	12	-15	
Sweet Grass	31	38	32	20	9	2	-7	
Teton	76	79	62	33	14	11	-3	
Toole	24	35	48	60	22	8	-14	
Treasure	1	2	8	7	2	0	-2	
Valley	19	50	43	50	38	16	-22	
Wheatland	2	17	34	22	17	6	-11	
Wibaux	5	7	6	5	0	1	1	
Yellowstone	1560	1508	2949	1344	606	313	-293	
MONTANA	9775	11649	17178	9598	6181	4514	-1667	

*Note: Data are based on the date of report into the Montana Infectious Disease Information System (MIDIS). Underlined numbers in the above table reflect adjusted counts and may include cases diagnosed but not reported in earlier time frames. These adjustments result from local and state data reconciliation efforts, conducted to ensure accurate data.

County name	Eligible population 5+	Dose 1	Dose 2	Dose 3	Fully Immunized	Total Doses Administered	Percent eligible with first dose (5+)	Percent Fully Vaccinated (5+)
BEAVERHEAD	9,091	5,460	4,383	2,540	5,078	12,383	60%	56%
BIG HORN	11,975	8,177	6,993	2,680	7,365	17,850	68%	62%
BLAINE	6,044	3,662	2,930	1,470	3,137	8,062	61%	52%
BROADWATER	6,092	2,307	1,717	922	1,955	4,946	38%	32%
CARBON	10,476	5,565	4,751	2,633	5,100	12,949	53%	49%
CARTER	1,141	377	332	177	354	886	33%	31%
CASCADE	76,124	42,630	33,794	17,120	37,845	93,544	56%	50%
CHOUTEAU	5,430	2,219	1,861	1,257	2,048	5,337	41%	38%
CUSTER	10,692	5,324	4,278	2,296	4,786	11,898	50%	45%
DANIELS	1,559	739	643	341	698	1,723	47%	45%
DAWSON	8,071	3,503	2,894	1,556	3,202	7,953	43%	40%
DEER LODGE	8,887	6,339	5,221	3,174	5,797	14,734	71%	65%
FALLON	2,646	1,083	943	463	993	2,489	41%	38%
FERGUS	10,495	5,469	4,721	2,703	5,121	12,893	52%	49%
FLATHEAD	99,993	51,786	40,373	21,753	44,644	113,912	52%	45%
GALLATIN	110,900	82,273	63,015	32,661	69,171	177,949	74%	62%
GARFIELD	1,188	319	253	103	296	675	27%	25%
GLACIER	12,447	10,421	7,228	3,097	7,785	20,746	84%	63%
GOLDEN VALLEY	788	384	324	154	356	862	49%	45%
GRANITE	3,218	1,446	1,147	601	1,254	3,194	45%	39%
HILL	14,914	9,840	7,590	3,974	8,970	21,404	66%	60%
JEFFERSON	11,819	6,682	5,668	3,171	6,076	15,521	57%	51%
JUDITH BASIN	1,880	794	687	383	748	1,864	42%	40%
LAKE	29,280	19,788	16,204	8,592	17,407	44,584	68%	59%
LEWIS & CLARK	66,257	44,871	36,602	20,987	39,461	102,460	68%	60%
LIBERTY	2,234	853	720	440	820	2,013	38%	37%
LINCOLN	19,480	9,413	7,583	4,121	8,289	21,117	48%	43%
MADISON	8,589	4,389	3,460	2,038	3,897	9,887	51%	45%
MCCONE	1,562	449	414	234	423	1,097	29%	27%
MEAGHER	1,726	1,008	867	487	951	2,362	58%	55%
MINERAL	4,302	2,619	1,886	1,162	2,357	5,667	61%	55%
MISSOULA	115,881	84,489	69,954	39,915	75,976	194,358	73%	66%
MUSSELSHELL	4,458	1,719	1,394	713	1,589	3,826	39%	36%
PARK	15,969	11,128	8,631	4,857	9,556	24,616	70%	60%
PETROLEUM	483	162	142	85	152	389	34%	31%
PHILLIPS	3,675	1,885	1,453	887	1,761	4,225	51%	48%
PONDERA	5,389	3,541	2,764	1,430	3,139	7,735	66%	58%
POWDER RIVER	1,588	500	400	200	457	1,100	31%	29%
POWELL	6,534	4,204	3,120	1,797	3,911	9,121	64%	60%
PRAIRIE	994	461	411	229	434	1,101	46%	44%
RAVALLI	42,972	24,379	19,501	11,694	21,875	55,574	57%	51%
RICHLAND	10,310	4,440	3,490	1,811	4,172	9,741	43%	40%
ROOSEVELT	9,918	5,611	4,146	1,972	4,890	11,729	57%	49%
ROSEBUD	8,160	5,421	4,296	2,130	4,818	11,847	66%	59%
SANDERS	11,641	5,001	4,140	2,264	4,434	11,405	43%	38%
SHERIDAN	3,075	1,931	1,698	975	1,832	4,604	63%	60%
SILVER BOW	33,267	23,689	20,218	11,047	21,555	54,954	71%	65%
STILLWATER	9,451	4,323	3,409	2,024	3,960	9,756	46%	42%
SWEET GRASS	3,523	1,697	1,314	786	1,539	3,797	48%	44%
TETON	5,819	3,100	2,186	1,216	2,625	6,502	53%	45%
TOOLE	4,391	2,309	1,743	740	2,147	4,792	53%	49%
TREASURE	623	425	294	141	317	860	68%	51%
VALLEY	6,931	3,356	2,712	1,653	3,166	7,721	48%	46%
WHEATLAND	2,035	803	695	395	750	1,893	39%	37%
WIBAUX	898	354	298	128	306	780	39%	34%
YELLOWSTONE	153,378	91,926	76,103	38,559	82,349	206,588	60%	54%
MONTANA	1,020,663	627,043	503,994	270,938	554,094	1,401,975	61%	54%